



Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

Common Name	Varathane Elite® Diamond Finish Aerosol	Code	Aerosol Diamond Finish® Products
Supplier	The Flecto Company, Inc. 1000 45th Street Oakland, California 94608	MSDS#	March 1998
Synonym	2000-81, 2001-81, 2002-81	TSCA Inventory	All ingredients have been reviewed.
Trade name	Varathane Elite® Diamond Aerosol	Validation Date	6/16/98
Material Uses	Clear finish for use on most indoor surfaces.	Print Date	6/16/98
Manufacturer	Diversified Brands 31500 Solon Road Solon, OH 44139-3528	In case of Emergency	Emergency phone: 800-255-3924 For Information Call: 800-635-3286

Section 2: Composition and Information on Ingredients

Name	CAS #	% by Weight	TLV/PEL	LC ₅₀ /LD ₅₀
Isopropyl alcohol	000067830	<5.5	TWA: 400 CEIL: 500 (ppm) TWA: 980 CEIL: 1225 (mg/m ³)	ORAL (LD50): Acute: 3600 mg/kg [Mouse]. 5000 mg/kg [Rat].
Ethylene glycol monobutyl ether	000111762	<6.5	TWA: 50 CEIL: 150 (ppm) TWA: 240 CEIL: 720 (mg/m ³)	ORAL (LD50): Acute: 1230 mg/kg [Mouse]. 1480 mg/kg [Rat]. 300 mg/kg [Rabbit].
Dimethyl ether	115-10-8	<36.0	Not available.	Not available.

Section 3: Hazards Identification

Emergency Overview	HIGHLY FLAMMABLE LIQUID AND VAPOR, VAPOR MAY CAUSE FLASH FIRE. MAY BE HARMFUL IF SWALLOWED.
Potential Acute Health Effects	Severe over-exposure can result in death. Use as directed, deliberate inhalation of contents may be harmful or fatal. Keep out of reach of children.
Potential Chronic Health Effects	CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available.
Target Organs:	Ethylene glycol monobutyl ether may cause red blood cell hemolysis leading to possible liver and kidney damage. Solvent may cause defatting dermatitis.
Routes of Entry	Inhalation. Eye contact. Ingestion. Skin contact.
Medical Conditions Aggravated by Overexposure:	There is no known effect from chronic exposure to this product. Repeated or prolonged exposure is not known to aggravate medical condition.
Signs and Symptoms of Overexposure:	Dizziness, nausea. Irritation to the skin and eyes.

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Section 4: First Aid Measures

Eye Contact	IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. COLD water may be used.
Skin Contact	After contact with skin, wash immediately with plenty of water
Hazardous Skin Contact	No additional information.
Inhalation	Allow the victim to rest in a well ventilated area. Seek immediate medical attention. If the victim is not breathing, perform mouth-to-mouth resuscitation.
Hazardous Inhalation	If fumes are still suspected to be present, the rescuer should WEAR AN APPROPRIATE MASK OR A SELF-CONTAINED BREATHING APPARATUS. Evacuate the victim to a safe area as soon as possible. If the victim is breathing, check for unusual breath odors. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Maintain an open airway. Seek immediate medical attention
Ingestion	If ingested, seek medical advice immediately and show the container or the label
Hazardous Ingestion	INDUCE VOMITING by sticking finger in throat. Seek medical attention.

Section 5: Fire and Explosion Data

Flammability of the Product	Flammable.
Auto-Ignition Temperature	Not available.
Flash Points	The lowest known value is CLOSED CUP: -41°C (-41.8°F). (Dimethyl ether)
Flammable Limits	Lower-1.1% (By Volume) Upper-27.0% (By Volume)
Products of Combustion	These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2).
Fire Hazards in Presence of Various Substances	Flammable in presence of open flames and sparks, of oxidizing materials
Explosion Hazards in Presence of Various Substances	Slightly explosive in presence of oxidizing materials. Vapour forms explosive mixture with air between upper and lower flammable limits.
Fire Fighting Media and Instructions	Flammable gas. SMALL FIRE: Use DRY chemicals, CO2, alcohol foam or water spray. LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet. Move containing vessels from fire area if without risk. Cool containing vessels with flooding quantities of water until well after fire is out. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion. DO NOT extinguish a leaking gas flame unless leak can be stopped. Extinguish secondary fire. Handle damaged cylinders with extreme care. Use extinguishing media suitable for surrounding materials.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	No additional remark.

Section 6: Accidental Release Measures

Small Spill	Dilute with water and mop up, or absorb with an inert DRY material and place in an appropriate waste disposal container.
Large Spill	Use appropriate containment to avoid environmental contamination. Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Section 7: Handling and Storage

Handling	After handling, always wash hands thoroughly with soap and water.
Storage	Keep container dry. Ground all equipment containing material. Keep container tightly closed in a cool, well-ventilated place. Protect from freezing. Do not puncture, incinerate, store the container at temperatures above 49°C (120°F) or in direct sunlight.

Section 8: Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.	
Personal Protection	Safety glasses. Lab coat. Wear appropriate respirator when ventilation is inadequate. Be sure to use a MSHA approved respirator or equivalent. Gloves(impervious).	
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. Be sure to use a MSHA/NIOSH approved respirator or equivalent.	
Chemical Name or Product Name	CAS #	Exposure Limits
Isopropyl alcohol	000067530	TWA: 400 CEIL: 500 (ppm) TWA: 980 CEIL: 1225 (mg/m³)
Ethylene glycol monobutyl ether	000111762	TWA: 50 CEIL: 150 (ppm) TWA: 240 CEIL: 720 (mg/m³)
Dimethyl ether	115-10-8	Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance	Liquid. (Aerosol)	Odor	Alcohol like. (Slight)
Molecular Weight	Not applicable.	Taste	Not available.
pH (1% soln/water)	Neutral.	Color	Milky
Boiling/Condensation Point	Not available.		
Melting/Sublimation Point	Not available		
Critical Temperature	Not available.		
Specific Gravity	0.81 - 0.85 (Aerosol)		
Vapor Pressure	Not available.		
Vapor Density	Not available.		
Volatility	<86% (v/v).		
Odor Threshold	Not available.		
Evaporation rate	>1 compared to Ether (anhydrous).		
Viscosity	Not available		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	See solubility in water, methanol, diethyl ether.		

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Aerosol**

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Solubility	Easily soluble in cold water. Soluble in hot water, methanol, diethyl ether.
Physical Chemical Comments	Not available.

Section 10: Stability and Reactivity Data

Chemical Stability	The product is stable.
Conditions of Instability	Protect from freezing. Do not puncture, incinerate, store the container at temperatures above 49°C (120°F) or in direct sunlight.
Incompatibility with various substances	Not available.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	No

Section 11: Toxicological Information

Toxicity to Animals	Acute oral toxicity (LD50): 300 mg/kg [Rabbit]. (Ethylene glycol monobutyl ether)
Chronic Effects on Humans	Ethylene glycol monobutyl ether may cause red blood cell hemolysis leading to possible liver and kidney damage. Solvent may cause defatting dermatitis.
Other Toxic Effects on Humans	No specific information is available in our database regarding the other toxic effects of this material for humans.
Special Remarks on Toxicity to Animals	No additional remark.
Special Remarks on Chronic Effects on Humans	Detected in maternal milk in human. (Isopropyl alcohol)
Special Remarks on other Toxic Effects on Humans	No additional remark.


Section 12: Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely.
Toxicity of the Products of Biodegradation	The products of degradation are less toxic than the product itself.
Special Remarks on the Products of Biodegradation	No additional remark.

Section 13: Disposal Considerations

Waste Information	Reuse or recycle if possible. Consult local or regional authorities for collection points. Do not puncture, incinerate, store the container at temperatures above 49°C (120°F) or in direct sunlight.
Waste stream	Consult local or regional authorities.

Section 14: Transport Information

DOT Classification	Consumer Commodity ORM-D	
Proper Shipping Name	Paint	
DOT Identification Number	ORM-D	
Packing Group	None	
Maritime transportation	Not available.	
Hazardous Substances Reportable Quantity	Not available.	
Special Provisions for Transport	No additional remark.	
TDG Classification	TDG CLASS 2.1: Flammable gas.	
ADR Classification	ADR CLASS: Flammable gas.	
IMDG Classification	IMDG CLASS 2.1: Flammable gas.	
IATA Classification	IATA CLASS 2.1: Flammable gas.	

Section 15: Regulatory Information

Federal and State Regulations	SARA 313 toxic chemical notification and release reporting: Ethyleneglycol monobutyl ether;	
Other Classifications	WHMIS (Canada)	WHMIS CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). WHMIS CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). WHMIS CLASS D-2B: Material causing other toxic effects (TOXIC).
	Canadian Regulatory Lists	No products were found.
	DSCL (EEC)	R11- Highly flammable. R18- In use, may form flammable/explosive vapor-air mixture. R22- Harmful if ingested.
	International Regulatory Lists	No products were found.

Section 16: Other Information

HMIS (U.S.A.)	<table><tr><td>Health Hazard</td><td>2</td></tr><tr><td>Fire Hazard</td><td>4</td></tr><tr><td>Reactivity Hazard</td><td>0</td></tr><tr><td>Personal Protection</td><td>G</td></tr></table>	Health Hazard	2	Fire Hazard	4	Reactivity Hazard	0	Personal Protection	G	National Fire Protection Association (U.S.A.)	Health	<table><tr><td>4</td><td>0</td></tr><tr><td>2</td><td></td></tr></table>	4	0	2		Fire Hazard Reactivity Specific hazard
Health Hazard	2																
Fire Hazard	4																
Reactivity Hazard	0																
Personal Protection	G																
4	0																
2																	
References	-Manufacturer's Material Safety Data Sheet.																
Other Special Considerations	This material is transported as a Consumer Commodity and is classed as ORM-D. This aerosol is less than 67% VOC by weight and complies with Air Quality Regulations in the USA. Packaged in 11.25 ounce steel aerosol containers.																

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Aerosol**

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Validated by Ken Trautwein on 6/16/98.

Verified by Jim Tuck.

Printed 6/16/98.

Emergency phone:

800-255-3924

For Information Call:

800-635-3286

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